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provided by a satellite-based positioning system, wherein the differential positional input data is a differential GPS data provided from a Global Positioning Satellite (GPS) unit;

a positional information unit which receives the differential positional input data

a terrain database unit, containing data of the localized terrain over which the vehicle is traveling;

an image generation processing unit having a render engine which receives differential data from the positional information unit and the terrain database unit and which generates the 3-D virtual image representational of the terrain over which the vehicle is traveling; and

[The system of claim 26, wherein the system further comprises:]

a radar information unit that provides radar data to the image generation processing unit, wherein the image generation processing unit incorporates the radar data from the radar information unit with data from the terrain database unit and the positional information unit to generate the 3-D virtual image representative of the terrain over which the vehicle is traveling.